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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,712	12/11/2001	Mark Paine	9623/378	1404
757	7590	03/01/2004	EXAMINER	
GENERAL NUMBER 00757			LEROUX, ETIENNE PIERRE	
BRINKS HOFER GILSON & LIONE			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/020,712	PAIN ET AL.
	Examiner Etienne P LeRoux	Art Unit 2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-65 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 December 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \*    c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7.8.9</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

***Claim Objections***

Claim 1 is objected to because of the following informalities: Claim 1 recites “recommending the additional search terms from among the candidate search terms.” The phrase “recommending the additional search terms” does not need the word “the.” Appropriate correction is required.

Claim 65 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 64. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites “code to receive accept and reject indications from the advertiser.” It is unclear how Applicant can simultaneously claim accepting and rejecting.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4, 5-9, 41-45, 46-50, 59, 64 and 65 of the claimed invention are directed to non-statutory subject matter for the reasons given below:

MPEP 2106 states:

**1. Nonstatutory Subject Matter**

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material."

Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). When nonfunctional descriptive material is recorded

on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978).

Claims 1-4, 5-9, 41-45, 46-50, 59, 64 and 65 are not directed to functional descriptive material on a computer-readable medium such that the use of technology permits the function of the descriptive material to be realized.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 15, 16, 18, 19, 21, 23-39, 41-43, 45-49 and 51-65 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,867,799 issued to Lang et al (hereafter Lang).

**Claims 1, 46 and 59:**

Lang discloses a method for a database search system, the method comprising:

- receiving a list of search terms associated with an advertiser on the database search system [user profile per col 7, lines 31-54]
- determining candidate search terms based on search terms of other advertisers on the database search system [information filtering per col 8, lines 4-13]

- recommending the additional search terms from among the candidate search terms [providing relevant information entity of particular or actual interest to a particular user, col 7, lines 14-30 col 7, line 55 through col 8, line 12]

Claims 2 and 32 and 47:

Lang discloses assigning ratings to search terms and computing a correlation between the advertiser and one or more of the other advertisers using the assigned ratings of advertiser search terms [Fig 6, 427].

Claim 3 and 33 and 48:

Lang discloses predicting a likelihood that a candidate search term will be relevant to the advertiser [Fig 1, 33 and col 13, lines 53-58].

Claims 4 and 34:

Lang discloses determining a quality metric for the candidate search terms; and predicting relevance of candidate search terms based on the quality metric [Fig 6, 430].

Claims 5 and 6:

Lang discloses:

- maintaining a database of search listings including associated search terms [Fig 1, 31]
- receiving a list of search terms associated with an advertiser [information filtering per col 8, lines 4-13]
- computing ratings for search terms [Fig 6, 427, 430]

- recommending additional search terms to the advertiser based on the computed ratings  
[providing relevant information entity of particular or actual interest to a particular user, col 7, lines 14-30 col 7, line 55 through col 8, line 12]

Claim 7:

Lang discloses predicting ratings of search terms [Fig 1, 33 and col 13, lines 53-58 and Fig 6, 427, 430 and 432].

Claim 8:

Lang discloses receiving a list of initial search terms from the advertiser [user profile per col 7, lines 31-54]

Claim 9:

Lang discloses identifying an existing advertiser on the database search system and forming the list of search terms from search terms of the existing advertiser [information filtering per col 8, lines 4-13].

Claims 10, 15, 16, 30, 31, 51-55, 61 and 62:

Lang discloses receiving a website URL [inherently disclosed in internet connections of claim 88]

Lang discloses spidering the website associated with the URL to extract search terms for the list of search terms [receiving a data stream from a computer network, col 4, lines 43-47].

Claim 11:

Lang discloses receiving data from pages of the website [receiving a data stream from a computer network, col 4, lines 43-47], recording candidate search terms from the data

[information filtering per col 8, lines 4-13] and determining a quality metric for each candidate search term [Fig 6, 427, 430 432]

Claims 12 and 36:

Lang discloses sorting the candidate search terms according to the quality metric [Fig 6].

Lang discloses recommending only candidate search terms having a quality metric exceeding a threshold [col 15, lines 38-64].

Claim 13:

Lang discloses receiving data from one or more pages of the site [receiving a data stream from a computer network, col 4, lines 43-47] and examining text from the one or more pages for candidate search terms [information filtering per col 8, lines 4-13]

Claim 18:

Lang discloses a database search system comprising a database of search terms each search term being associated with one or more advertisers [Fig 1, 31], and program code configured to recommend additional search terms for an advertiser based on search terms in the database [providing relevant information entity of particular or actual interest to a particular user, col 7, lines 14-30 col 7, line 55 through col 8, line 12].

Claim 19:

Lang discloses collaborative filtering code configured to recommend the additional search terms based on search terms associated with other advertisers of the database search system [Fig 4, 260].

Claim 21:

Lang discloses the program code comprises a program loop [Fig 4].

Claim 23:

Lang discloses wherein the program code comprises spidering code to recommend the additional search terms [receiving a data stream from a computer network, col 4, lines 43-47].

Claims 24 and 60:

Lang discloses wherein the program code comprises spidering code to find initially accepted search terms in a web site; and collaborative filtering code to provide the recommended additional search terms [receiving a data stream from a computer network, [col 4, lines 43-47].

Claim 25:

Lang discloses wherein the spidering code is configured to spider a web site of the advertiser [receiving a data stream from a computer network, col 4, lines 43-47].

Claim 26:

Lang discloses wherein the spidering code is configured to spider a web site specified by the advertiser [receiving a data stream from a computer network, col 4, lines 43-47].

Claim 27:

Lang discloses filtering code to filter candidate search terms according to a quality metric to produce the recommended additional search terms [Fig 6, 427, 430 432].

Claim 28:

Lang discloses search engine program code configured to search the database in response to a search query from a user [information filtering per col 8, lines 4-13].

Claim 29:

Lang discloses a data base operating method for a database search system [Fig 1], filtering the initial list of advertiser search terms using search terms of other advertisers [information filtering per col 8, lines 4-13], and storing in a search listing database search listings for the advertiser, the search listings formed with the filtered search terms [Fig 1, 31], spidering a specified web site to obtain an initial list of advertiser search terms for an advertiser [receiving a data stream from a computer network, col 4, lines 43-47].

Claim 35:

Lang discloses wherein spidering the specified web site comprises: receiving data from pages of the specified website [inherently disclosed in internet connections of claim 88]; recording candidate search terms from the data [information filtering per col 8, lines 4-13]; and determining a quality metric for each candidate search term [Fig 6, 427, 430, 432].

Claim 37:

Lang discloses determining a correlation between a web site of the advertiser and web sites of other advertisers on the database search system [Fig 4, 260]; using the correlation [Fig 4,

260]; determining ratings for each advertiser search term in the initial list of advertiser search terms [Fig 6, 427, 430, 432].

Claims 38 and 39:

Lang discloses presenting the organized search terms to the advertiser and receiving advertiser acceptance indications for the organized search terms [presenting the proposed informon to the user, col 4, lines 43-63], adjusting the list of advertiser search terms according to the acceptance indications, filtering the adjusted list [adapting the content profile per col 4, lines 43-63].

Claim 41:

Lang discloses receiving a search term of an advertiser [user profile, col 7, lines 31-54]; in response to the received search term, generating a list of additional related search terms [information filtering , col 8, lines 4-13] and receiving advertiser selected search terms from the list of additional related search terms [providing relevant information entity of particular or actual interest to a particular user, col 7, lines 14-30, col 7 line 55 through col 8, line 12].

Claim 42:

Lang discloses generating the list of additional search terms comprises matching one or more text strings from the received search term with a database of search terms [user profile per col 7, lines 31-54]

Claim 43:

Lang discloses matching one or more text strings from the received term with a thesaurus [col 20, lines 9-13].

Claim 45:

Lang discloses entering the selected search term as a default value in each of the one or more search listings [user profile per col 7, lines 31-54].

Claim 49:

Lang discloses computing correlations for the advertiser and the other advertisers based on the information describing the advertiser and information describing the other advertisers [Fig 6, 432], and recommending search terms based at least in part on the correlations [Fig 6, 432]

Claims 56 and 63:

Lang discloses calculating a quality metric for candidate search terms, the quality metric for a respective candidate search term being a function of the respective search term's web frequency and a function of a search term's search frequency [col 10, lines 20-45] and recommending search terms for which the calculated quality metric exceeds a threshold [col 15, lines 38-64].

Claim 57:

Lang discloses a second metric [col 11, lines 8-17].

Claim 58:

Lang discloses automatically calibrating the quality threshold [col 15, lines 38-64].

Claim 64:

Lang discloses receiving feedback from the advertiser on the recommended search terms; and changing the recommended search terms based on the feedback [col 4, lines 55-60].

Claim 65:

Lang discloses receiving feedback from the advertiser on the recommended search terms; and changing the recommended search terms based on the feedback [col 4, lines 55-60].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of US Pat No 6,141,010 issued to Hoyle (hereafter Hoyle).

Claim 14:

Lang discloses the elements of claims 5, 10 and 13 as noted above.

Lang fails to disclose examining meta tags from the one or more pages.

Hoyle discloses examining meta tags from the one or more pages [col 15, line 54 through col 16, line 8].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lang to include examining meta tags from the one or more pages as taught by Hoyle.

The ordinarily skilled artisan would have been motivated to modify the combination of Lang per the above for the purpose of obtaining key words which are embedded in a web page.

Claims 17 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of US Pat No 6,078,866 issued to Buck et al (hereafter (Buck)).

Claims 17 and 40:

Lang discloses the elements of claims 5, 29 and 38 as noted above.

Lang fails to disclose preparing search results by formatting matching search terms according to advertiser bid amounts associated with the search listings; and communicating the search results to the user.

Buck discloses preparing search results by formatting matching search terms according to advertiser bid amounts associated with the search listings; and communicating the search results to the user [claim1]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lang to include preparing search results by formatting matching search terms according to advertiser bid amounts associated with the search listings; and communicating the search results to the user as taught by Buck.

The ordinarily skilled artisan would have been motivated to modify Lang per the above for the purpose of providing a means for generating revenue for the internet service provider.

Claims 20 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of US Pat No 5,872,850 issued to Klein et al (hereafter Klein).

Claim 20 and 50:

Lang discloses the elements of claims 18, 19, 46 and 49 as noted above.

Lang fails to disclose wherein the collaborative filtering code comprises Pearson correlation code.

Klein discloses wherein the collaborative filtering code comprises Pearson correlation code [col 10, lines 9-34].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lang to include wherein the collaborative filtering code comprises Pearson correlation code as taught by Klein.

The ordinarily skilled artisan would have been motivated to modify Lang per the above for the purpose of determining a similarity factor between two users [col 10, lines 9-13].

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of US Pat No 5,799,268 issued to Boguraev.

Claim 44:

Lang discloses the elements of claim 41 as noted above.

Lang fails to disclose displaying a form for entering one or more search listings for a selected search term.

Boguraev discloses displaying a form for entering one or more search listings for a selected search term [Fig. 1].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lang to include displaying a form for entering one or more search listings for a selected search term as taught by Boguraev.

The ordinarily skilled artisan would have been motivated to modify Lang per the above for the purpose of providing a convenient means of inputting user data.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahić, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Patent related correspondence can be forwarded via the following FAX number (703) 872-9306

Etienne LeRoux  
2/23/2004 *EL LeRoux*